

An OLED device structure and a method of making the same. The OLED device structure comprises (a) a substrate, (b) an OLED display area comprising one or more active pixels disposed over the substrate, wherein each of the one or more active pixels comprises an anode region, a cathode region and a light-emitting region, (c) a cover over the OLED display area, wherein the cover permits transmission of light from the one or more active pixels and an outer environment, and wherein the cover and the substrate cooperate to restrict transmission of oxygen and water vapor from the outer environment to the OLED display area, and (d) a patterned getter layer disposed between the substrate and the cover, wherein the patterned getter layer is configured so as to substantially avoid obstructing the transmission of light from the one or more pixels. Also disclosed are a flexible OLED device and an organic optoelectronic device structures having related configurations.